

Abstract

Polyisobutenylphenol-containing Mannich adducts are prepared by

5

a) alkylation of a phenol with highly reactive polyisobutene having a number average molecular weight of less than 1000 and a polydispersity of less than 3.0, at below about 50°C in the presence of an alkylation catalyst;

10

b) reaction of the reaction product from a) with

b1) an aldehyde chosen from formaldehyde, an oligomer and a polymer of formaldehyde and

15

b2) at least one amine which has at least one primary or one secondary amino function

and are used as detergent additives in fuel and lubricant compositions, and additive concentrates, fuel compositions and lubricant compositions contain these Mannich adducts.

25

30

35

40

45